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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,671	03/18/2004	Timothy G. Offerle	81095823FGT1905	2670
28549	7590	12/23/2008	EXAMINER	
Dickinson Wright PLLC 38525 Woodward Avenue Suite 2000 Bloomfield Hills, MI 48304			TO, TUAN C	
			ART UNIT	PAPER NUMBER
			3663	
			MAIL DATE	DELIVERY MODE
			12/23/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/708,671	<b>Applicant(s)</b> OFFERLE ET AL.	
	<b>Examiner</b> TUAN C. TO	<b>Art Unit</b> 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2-14 and 27-35 is/are pending in the application.
- 4a) Of the above claim(s) 2-14 and 33-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

In view of the appeal brief filed on 10/1/2008, PROSECUTION IS HEREBY REOPENED. As new ground of rejection is set forth below:

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Jack W. Keith/

Supervisory Patent Examiner, Art Unit 3663

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 27, 29-32 are rejected under 35 U.S.C. 102 (b) as being anticipated by Takagi et al. (US 6,324,458 B1).

Regarding claim 27, Takagi et al. discloses a vehicle comprising a shift lever having a reverse position generating a reverse position signal. For example, in figure 1B and the associated text in column 5, lines 37-47, drive direction F (Forward) or R (rearward) from the running direction sensor 62 may be provided by a shift position switch. Takagi et al. further teaches a control unit, coupled to the shift lever, applying brake-steer in response to the reverse position signal. As set in column 5, line 37-47, the driving direction signal is generated from the direction sensor (62) which may be provided by the shift position switch. Next, in column 10, Takagi et al. illustrate a process for applying brake-steer when the vehicle is driven rearward in order to control turn running behavior of a vehicle.

As to claim 29, Takagi et al. further teaches a brake system that is controlled when applying the brake-steer in response to the forward or reverse direction. As set forth in column 5, lines 30-47, the vehicle control means (40) operates the hydraulic circuit means (44) to operate wheel cylinders 46FL, 46FR, 46RL, and 46RR for the front left, front right, rear left and rear right wheels for braking the corresponding wheels.

As to claim 30, Takagi et al. further discloses the braking system that is controlled with applying brake-steer in response to the forward or reverse direction in order to reduce turning radius (see column 10, lines 3-46).

As to claim 31, Takagi et al. further discloses that drive torque is controlled when applying brake-steer in response to the forward or reverse direction (see column 10, lines 3-46).

As to claim 32, Takagi et al. further teaches a steering wheel angle sensor generating a steering wheel angle signal, and a control is programmed to apply brake-steer in response to the reverse directional signal and the steering wheel angle signal. As shown in figure 1B, the steering wheel angle sensor (54) generating a steering wheel angle signal  $\theta$ , and the vehicle behavior control (40) is programmed to apply brake-steer in response to the reverse direction signal generated by the drive direction sensor (62) and said the steering wheel angle signal  $\theta$  generated by the steering wheel angle sensor (54).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. (US 6,324,458 B1) and in view of Suzuki et al. (US 4609064).

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Although Takagi et al. teaches a control system that applies brake-steer in response to the backward or reward driving behavior, Takagi et al. fails to disclose a transfer case having a transfer case mode, and a control changing the transfer case mode based on brake-steer.

Suzuki et al. teaches a part-time type four-wheel drive system has a 2WD-4WD changeover means capable of changing the drive system from a four-wheel drive mode to a two-wheel drive and vice versa. The drive system of Suzuki et al. include a control unit (32) (see figure 2) that automatically changing the drive system from the four-wheel drive mode to the two-wheel drive mode when a steering angle of the vehicle become equal or larger than a predetermined angle (see abstract and figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the drive system as taught by Takagi et al. to include the drive system that automatically changing from four-wheel drive mode to a two-wheel drive mode when a steering angle equal or larger than a predetermined angle as taught in Suzuki et al. in order to improve the stability when the vehicle make a sharp turn.

### ***Response to Arguments***

Applicant's arguments with respect to claims 27-32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusions***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan C To/

Primary Examiner of Art Unit 3663/3600

December 19, 2008



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